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PTO/SB/21 (08-90)

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## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number Of Pages In This Submission

10 + 34  
REF

Application Number

10/044,463

Filing Date

January 10, 2002

First Named Inventor

Davide R. GRASSETTI

Group Art Unit

3736

Examiner Name

To Be Assigned

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APR 23 2002  
TECHNOLOGY CENTER 3700

### ENCLOSURES (check all that apply)

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Assignment Papers (for an Application)	<input type="checkbox"/> After Allowance Communication to Group TECHNOLOGY CENTER 3700
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
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<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): 1. Form PTO-1449 plus 1 copy (6 pages) 2. Thirty-four (34) References 3. Return Receipt Postcard
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Remarks

### SIGNATURE OF APPLICANT, ATTORNEY OR AGENT

Firm  
or  
Individual Name

Morrison & Foerster LLP, 755 Page Mill Rd, Palo Alto, California 94304-1018

Terri M. Shieh-Newton, Reg. No. 47,081

Signature

Date

April 15, 2002

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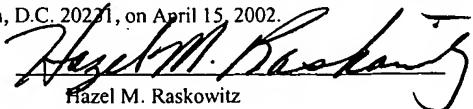
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PATENT  
Docket No. 497872000400

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TECHNOLOGY CENTER R3700

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Davide R. GRASSETTI and  
Camillo MORO

Serial No.: 10/044,463

Filing Date: January 10, 2002

For: METHOD OF IMMUNOMODULATION  
USING THIONE-FORMING  
DISULFIDES

Examiner: To Be Assigned

Group Art Unit: 3736

INFORMATION DISCLOSURE  
STATEMENT UNDER 37 C.F.R. § 1.97 AND § 1.98

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

Pursuant to 37 C.F.R. § 1.97 and § 1.98, Applicants submit for consideration in the above-identified application the documents listed on the attached Form PTO-1449. Copies of the documents are also submitted herewith. The Examiner is requested to make these documents of record.

This Information Disclosure Statement is submitted:

- With the application; accordingly, no fee or separate requirements are required.
- Within three months of the application filing date or before mailing of a first Office Action on the merits; accordingly, no fee or separate requirements are required.
- After receipt of a first Office Action on the merits but before mailing of a final Office Action or Notice of Allowance.
  - A fee is required. A check in the amount of \* is enclosed.
  - A fee is required. Accordingly, a Fee Transmittal form (PTO/SB/17) is attached to this submission in duplicate.
  - A Certification under 37 C.F.R. § 1.97(e) is provided below; accordingly; no fee is believed to be due.
- After mailing of a final Office Action or Notice of Allowance, but before payment of the issue fee.
  - A Certification under 37 C.F.R. § 1.97(e) is provided below and a check in the amount of \* is enclosed.
  - A Certification under 37 C.F.R. § 1.97(e) is provided below and a Fee Transmittal form (PTO/SB/17 is attached to this submission in duplicate.

Applicants would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

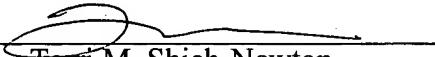
The information contained in this Information Disclosure Statement under 37 C.F.R. § 1.97 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, Applicants petition for any required relief including extensions of time and authorize the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing **497872000400**. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: April 15, 2002

Respectfully submitted,

By:

  
Terri M. Shieh-Newton  
Registration No. 47,081

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Form PTO-1449 <b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b> <i>(Use several sheets if necessary)</i>		Docket Number 497872000400	Application Number 10/044,463
		Applicant	Davide R. GRASSETTI and Camillo MORO
		Filing Date January 10, 2002	Group Art Unit 3736
		Mailing Date April 15, 2002	

**RECEIVED****APR 23 2002****U.S. PATENT DOCUMENTS**

Examiner Initials	Ref. No.	Date	Document No.	Name	Class	Subclass	Filing Date If TECHNOLOGY CENTER 3700
	1.	08/03/1971	3,597,160	Grassetti			
	2.	10/17/1972	3,698,866	Grassetti et al.			
	3.	05/01/1979	4,152,439	Grassetti			
	4.	03/29/1983	4,378,364	Grassetti			
	5.	06/01/1999	5,908,861	Kun			
	6.	03/28/2000	6,043,256	Grassetti			

**FOREIGN PATENT DOCUMENTS**

Examiner Initials	Ref. No.	Date	Document No.	Country	Class	Subclass	Translation YES NO
	7.	03/09/1976	985,170	Canada			
	8.	02/18/1999	WO 99/07368	WIPO			

**OTHER DOCUMENTS***(including author, title, Date, Pertinent Pages, Etc.)*

Examiner Initials	Ref. No.	Title
	9.	Anderson et al. (1980). "T-cell-dependent B-cell Stimulation is H-2 Restricted and Antigen Dependent Only at the Resting B-cell Level," <i>PNAS</i> 77(3):1612-1616.
	10.	Barnes, D and G. Sato. (1980). "Methods for Growth of Cultured Cells in Serum-Free Medium," <i>Anal. Biochem.</i> 102:255-270.
	11.	Boot, J.H. (1995). "Effects of SH-blocking Compounds on the Energy Metabolism in Isolated Rat Hepatocytes," <i>Cell Structure and Function</i> 20(3):233-238.
	12.	D'Amico, J.J and T.W. Bartram. (1960). "Thiazolethiols and Their Derivatives," <i>J. Org. Chem.</i> 25:1336-1342.
	13.	Daves et al. (1964). "Pyrimidines. XIII. 2- and 6-Substituted 4-Pyrimidinecarboxylic Acids," <i>J. Heterocyclic Chem.</i> 1:130-133.
	14.	Dröge et al. (1991). "Modulation of Lymphocyte Functions and Immune Responses by Cysteine and Cysteine Derivatives," <i>Am. J. Med.</i> 91(3C):140-144.

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		Mailing Date April 15, 2002	

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15.	Fox, H.H. and J.T. Gibas. (1958). "Nuclear Substitution Derivatives of Isonicotinic Acid," <i>J. Org. Chem.</i> 23:64-66. <b>APR 23 2002</b>
16.	Grassetti D.R. and J.F. Murray. (1967). "The Effect of 2,2'-dithiodipyridine on Thiols and Oxidizable Substrates of Ehrlich Ascites Cells and of Normal Mouse Tissues," <i>Biochem. Pharmacol.</i> 16(12):2387-2393. <b>TECHNOLOGY CENTER R3700</b>
17.	Grassetti D.R. and J.F. Murray. (1968). "Restoration of Glycolysis and Respiration in Ehrlich Ascites Tumor Cells Inhibited by 2,2'-dithiodipyridine," <i>Biochem. Pharmacol.</i> 17(11):2281-2290.
18.	Grassetti et al. (1966). "Synthesis of Some Homologs of Fluoropyruvic Acid and Their Effect on the Carbohydrate Metabolism of Ehrlich Ascites Tumor and on Lactate Dehydrogenase," <i>J. Med. Chem.</i> 9:149-151.
19.	Grassetti et al. (1967). "The Effect of Some Disulfides and Thiols on the Carbohydrate Metabolism of Ehrlich Ascites Tumor," <i>J. Med. Chem.</i> 10:1170-1172.
20.	Grassetti et al. (1970). "The Effect of Some Heterocyclic Disulfides and Thiones on the Carbohydrate Metabolism of Ehrlich Ascites Tumor," <i>J. Med. Chem.</i> 13:273-276.
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23.	Grassetti, D.R. (1986). "6,6'-Dithiodinicotic Acid Carboxypyridine Disulfide 6,6'Dithiobis-3-pyridinecarboxylic Acid," <i>Drugs of the Future</i> 11(7):559-561.
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26.	Julius et al. (1982). "Dissociation of Two Signals Required for Activation of Resting B Cells," <i>PNAS</i> 79:1989-1993.
27.	Mahato et al. (1997). "Cationic Lipid-Based Gene Delivery Systems: Pharmaceutical Perspectives," <i>Pharm. Res.</i> 14(7):853-859.
28.	Möller, G. ed. (1987). "Activation Antigens and Signal Transduction in Lymphocyte Activation," <i>Immunol Rev.</i> 95:1-194. (Table of Contents Only).
29.	Purnell, M.R. and W.J.D. Whish. (1980). "Novel Inhibitors of Poly(ADP-Ribose) Synthetase," <i>Biochem. J.</i> 185:775-777.
30.	Rath, C. (1931). "Mercaptane und Sulfosäuren des Pyridins," <i>Justus Liebigs Ann. Chem.</i> 487:105-119.
31.	Sprent, J. (1978). "Restricted Helper Function of F <sub>1</sub> Hybrid T Cells Positively Selected to Heterologous Erythrocytes in Irradiated Parental Strain Mice II. Evidence for Restrictions Affecting Helper Cell Induction and T-B Collaboration, Both Mapping to the K-End of the H-2 Complex," <i>J. Exp. Med.</i> 147:1159-1174.

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Form PTO-1449 <b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b> <i>(Use several sheets if necessary)</i>		Docket Number 497872000400	Application Number 10/044,463
		Applicant	Davide R. GRASSETTI and Camillo MORO
		Filing Date January 10, 2002	Group Art Unit 3736
		Mailing Date April 15, 2002	RECEIVED APR 23 2002

TECHNOLOGY CENTER R370		
32.		Weltin et al. (1995). "Immunosuppressive Activities of 6(5H)-Phenanthridinone, A New Poly(Ribose)Polymerase Inhibitor," <i>Int. J. Immunopharmac.</i> 17(4):265-271.
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